REMARKS

Applicants respectfully request reconsideration and allowance of the present application in view of the following remarks. Claims 33, 37-40, and 42-53 are pending in the application. Independent claim 33, for instance, is directed to a nonwoven composite material comprising a nonwoven material and an extruded film layer adhered to the nonwoven material. The extruded film layer is prepared from a blended composition that includes an unsaturated styrene-isoprene-styrene block copolymer having a melt flow rate that is less than 20 g/10 min., and a compatibilizer that includes a styrene-butadiene-styrene block copolymer having a melt flow rate of about 20 g/10 min. or more. As described throughout the present specification, this unique combination of unsaturated styrenic triblock copolymers results in a thermally stable composition for improved film extrusion processing of unsaturated block copolymers. As explained in the specification, while unsaturated block polymers have been frequently used in adhesive-type applications, the use of such polymers has presented significant manufacturing challenges in extrusion of film and filaments. The stability of the unsaturated block copolymers over the extended period of time required to extrude film and filaments is not predictable and often results in severe manufacturing disturbances. The cited references of record individually or in combination do not teach or suggest of the unique combination of claim 33 for solving the noted deficiencies.

Previous dependent claim 41, presently incorporated into independent claim 33, was rejected under 35 U.S.C. § 103(a) as being unpatentable over Vaughan et al. (U.S. Patent No. 6,531,544). Vaughan et al. is directed to an adhesive for adhesively bonding elastic to nonwoven in the presence of lotion. In one embodiment, the adhesive may

contain one or more block copolymers. Block copolymers comprising an unsaturated conjugated diene such as styrene-isoprene-styrene (SIS), styrene-butadiene-styrene (SBS) and mixtures thereof are disclosed as possible block copolymer components. At least one block copolymer is preferred to have a melt flow rate of less than about 20 g/10 min. A second block copolymer is preferred to have a melt flow rate of less than 10 g/10 min.

The Office Action states that Vaughan et al. discloses a first block copolymer with a MFR of less than 20 and a second one greater than 30. Applicants respectfully disagree. Vaughan et al. discloses:

> However, high styrene content (>30%) are typically not available in low melt flow rate grades. Since employing at least one block copolymer having a low melt flow rate is surmised to be critical to the invention, the styrene content of the preferred block copolymers typically ranges from about 15 wt-% to about 30 wt-% with respect to the total weight of the block copolymer. Col. 3, ll. 31-37 (emphasis added).
>
> The adhesive of the present invention preferable employs at least one block copolymer having a melt flow rate of less than about 20 g/10 min. Col. 3, ll. 63-65.
>
> The first block copolymer is typically an SIS block copolymer having a styrene content of about 30 wt-% or less. Col. 4, ll. 7-9.
>
> In the case of block copolymer having a styrene content of greater than 40 wt-% the melt flow rate is typically relatively high, about 30 MFR or greater. Preferably, the second block copolymer has a styrene content of about 30 wt-% or lower and a melt flow rate of less than 10 g/10 min. Col. 4, ll. 22-27 (emphasis added).

Thus, the Office Action indicates that Vaughan et al. discloses utilizing a second block copolymer that has a MFR of 30 or greater. Such is not the case. As can be seen from the above passages, when the styrene content is greater than 40 wt-%, the MFR is too high, thus, a styrene content of 30 wt-% or lower is desired to produce a MFR of 10 or

less. Thus, Vaughan et al. teaches away from a second block copolymer with an MFR of 20 or greater.

The Office Action points to Example 2 of Vaughan et al. in order to provide a "working example anticipating the claims." However, independent claim 33, as currently amended, calls for a compatibilizer that includes a styrene-butadiene-styrene block copolymer, wherein the compatibilizer has a melt flow rate of about 20 g/10 min. or more. Example 2 is deficient in this limitation. Furthermore, Applicants use of a styrene-isoprene-styrene block copolymer having a melt flow rate of less than 20 g/10 min. and a compatibilizer including a styrene-butadiene-styrene block copolymer, wherein the compatibilizer has a melt flow rate of about 20 g/10 min or more is not simply an obvious design choice as alleged by the Office Action in rejecting previous dependent claim 41. In certain ratios of SIS to SBS, a relatively flat viscosity line (see, for example, Fig. 3) is discovered, which is indicative of thermal stability in the extrusion process. The inventors discovered that the blended SIS and SBS polymer resins demonstrated a relatively constant viscosity, and exhibited an increased ability to withstand degradation in the extrusion process as the ratio of blended styrenic isoprene to styrenic butadiene approached certain ratios. Vaughan et al. does not disclose any such unforeseen benefits of an SIS/SBS blend in order to assist in solving manufacturing problems in extrusion of film and filaments. As such, independent claim 33 patentably defines over Vaughan et al.

Previous dependent claim 41, presently incorporated into independent claim 33, was also rejected under 35 U.S.C. § 103(a) as being unpatentable over Maris et al. (U.S. Patent Publication No. 2003/0125442). Maris et al. is directed to a free flowing

powder composition for use in powder slush molding, carpet backing, and paper and board coating that is free of oil or low in oil content that meets other industrial standards for slush molded products.

The Office Action correctly indicates that Maris et al. discloses a block copolymer "a1" having a MFR of less than 20. The Office Action also indicates that Maris et al. discloses a second styrenic block copolymer "a2" and utilizes In re Fitzgerald to shift the burden to Applicant to prove that Maris et al. fails to disclose Applicant's claimed property (in this case a styrene-butadiene-styrene block copolymer having a melt flow rate of about 20 g/10 min. or more). Specifically, the Office Action points to Kraton G1652[1] as a disclosed "a2" copolymer that anticipates Applicant's claimed limitation. In addition, Maris et al. discloses examples of SBS copolymers are Kraton D-1101, Kraton D-1102 and Kraton D-4271. Technical data sheets for each of the copolymers listed above (including Kraton G1652 as referenced in the Office Action) are attached in **Appendix**. According to the data sheets, Kraton G1652 has an MFR of 5.0 g/10 min., Kraton D1101 has an MFR of 1 g/10 min., Kraton D1102 has an MFR of 11 g/10 min., and Kraton D-4271 has an MFR of 11 g/10 min. Thus, Maris et al. fails to disclose all limitations of independent claim 33. As such, independent claim 33 patentably defines over Maris et al.

Dependent claim 50 was rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Specifically, the Office Action indicated that it is unclear in that the test for hysteresis is unstated. Applicants respectfully disagree. On pg. 16, lines 6-23 of the

[1] Applicants note that Kraton G1652 is a selectively hydrogenated S-B*-S block copolymer (See Maris et al. at ¶ [0026]

present specification, Applicants disclose the "Stress-Strain Cycle Test" in which the formula for measuring hysteresis is disclosed as "% HYSTERESIS = [(LOADING ENERGY – UNLOADING ENERGY)/LOADING ENERGY] x 100." Applicants submit that this disclosure is fully compliant with 35 U.S.C. § 112, second paragraph and respectfully request withdrawal of the rejection.

As such, independent claim 33 patentably defines over the references.

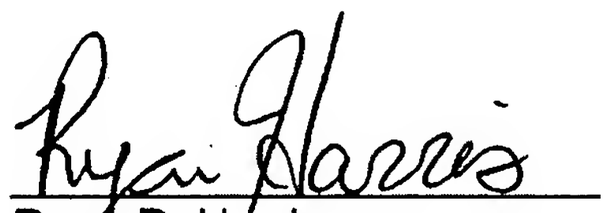
Furthermore, Applicants respectfully submit that, at least for the reasons indicated above, the dependent claims 37-40 and 42-53 also patentably define over the reference(s) cited. The patentability of the dependent claims, however, certainly does not hinge on the patentability of the independent claims. For instance, dependent claim 42 includes the limitation that the styrene-isoprene-styrene and styrene-butadiene-styrene are present in the blended composition in a ratio of about 2:1. As the "Blends of only SIS and SBS polymers" example indicates, the claimed about 2:1 ratio exhibited the most optimal results. The ability of the about 2:1 blend to withstand the temperatures commonly encountered in a melt over an extended period allows such polymers to be processed into film and filaments using manufacturing processes that would normally degrade the polymers. Dependent claim 51 includes the limitation that the blended composition further comprises a polyolefinic polymer. It has been discovered that if certain ratios of SBS block copolymer compatibilizer are blended with SIS block copolymers, the thermal stability over a lengthy period of extrusion/processing time and temperature ranges can be achieved when such blended unsaturated styrenic block copolymers are used as a film or filament blend or further blended with additional polymers, such as polyolefinic homopolymers or copolymers.

In summary, Applicants respectfully submit that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Mullis is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,

DORITY & MANNING, P.A.



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Date: October 24, 2007

Attachments

Appendix

- Kraton G-1652 Technical Data
- Kraton D1101 Technical Data
- Kraton D1102 Technical Data
- Kraton D-4271 Technical Data